DOE O 413.3A (Updated 5/18/09)

Preconceptual Planning	Conceptual Design	Preliminary Design	Final Design	Construction	Operations
❖	❖	❖	❖		❖
CD-0	**CD-1**	**CD-2**	**CD-3**		**CD-4**
Approve Mission Need	Approve Alternative Selection & Cost Range	Approve Performance Baseline	Approve Start of Construction		Approve Start of Operations or Project Completion

Actions Authorized by Critical Decision (CD) Approval

CD-0	CD-1	CD-2	CD-3	CD-4
• Proceed with Conceptual Design • Request PED funding • Start monthly PARS & Quarterly Project Performance reporting	• Allow Expenditure of PED Funds for preliminary design • Approval of long-lead procurement if necessary	• Establish Performance Baseline • Continue design • Request construction funding	• Approve expenditure of funds for construction	• Allow start of operations or project completion

Non-Nuclear Facilities--Prerequisite Activities for CDs

CD-0	CD-1	CD-2	CD-3	CD-4

• Review of Mission Need Statement (MSN) by Office of Program Analysis & Evaluation (CF-20) for $100M or greater.
• Perform Mission Need Independent Project Review (IPR) for Major System (MS) projects (>=$750K)
• Perform Pre-conceptual Planning
• Evaluate Information Technology (IT) projects with Departmental Enterprise Architecture framework
	• Review of Acquisition Strategy (AS) (OECM review for MS project)
	• Review of Conceptual Design
	  o Requirements Analysis
	  o Risk Analysis
	  o Alternative Analysis
	  o Value Management determination
	• Assess Requirements Analysis, Risk Analysis, Alternative Analysis, & Value Management.
	• Appoint FPD
	• Establish & charter Integrated Project Team
	• Ensure compliance with One-for-One Replacement requirement for building square footage
	• Ensure Integrated Safety Management Implementation
	• Ensure consideration for High Performance Sustainable Building
	• Assess if QA Program is acceptable
		• Perform Baseline External Independent Review (EIR) & validation by OECM for $100M or greater. Perform Independent Cost Review or Independent Cost Estimates for MS project as part of EIR
		• Program IPR for $20M to less than $100M
		• Review of Preliminary Design
		• Establish compliant project EVMS for $20M or more, & OECM certifiable EVMS for project TPC with $50M or more
		• Conduct Value Engineering (as applicable)
		• Incorporate High Performance Sustainable Building provisions into design
		• Determine if QA Program is acceptable
			• Perform Executability EIR by OECM for MS projects
			• Perform IPR for Non-MS projects by Program (SC)
				• Verify Key Performance Parameter or Completion Criteria achieved
				• Perform Readiness Assessment or Operational Readiness Review
				• Revise environmental management system.
				
				Post CD-4 Closeout
				• Perform Final Administrative & Financial Closeout
				• Conduct Post Implementation Review for IT projects

Hazard Category 1, 2, and 3 Nuclear Facilities--Additional Prerequisite Activities/Documents for CDs

CD-0	CD-1	CD-2	CD-3	CD-4
	• Perform Technical IPR • Prepare Conceptual Safety Design Report (SDR) • Prepare a Preliminary Safety Validation Report (PSVR)	• Prepare Preliminary SDR • Prepare a PSVR based on updated design	• Prepare Preliminary Documented Safety Analysis Report (SAR) • Prepare SER	• Prepare Documented SAR with Technical Safety Requirements • Prepare SER

Prerequisite Documents

CD-0	CD-1	CD-2	CD-3	CD-4
• MNS • Tailoring Strategy	• Acquisition Strategy • Conceptual Design Report • Risk Management Plan • Risk Assessment • Preliminary PEP, • Preliminary Hazard Analysis (HA), • Preliminary Security Vulnerability Assessment Report (SVAR) • Initial Cyber Security Plan for IT projects. • QA Program Documentation	• Performance Baseline • Preliminary Design • Updated Risk Assessment • Updated PEP • Updated HA (Approved at Field Level) • Updated Preliminary SVAR • NEPA Documentation • Updated Initial Cyber Security Plan for IT projects	• Final Design • Updated CD-2 documents • Updated QA Program • An Approved Construction Project Safety & Health Plan • Updated Cyber Security Plan for IT projects	• Checkout, Testing & Commissioning Plan • Project Transition/ Closeout Plan • Transition-to-Operations Plan • Finalized QA Plan, SVAR, HA Report, Construction Project Safety & Health Plan, • Finalized Cyber Security Plan for IT projects & completed Certification & Accreditation, as required Post CD-4 Closeout • Final Project Closeout Report • Lessons Learned Report • Required Operational Documentation

AS-Acquisition Strategy   MNS-Mission Need Statement   SAR-Safety Analysis Report
EIR-External Independent Review   MS-Major Systems   SDR-Safety Design Report
EVMS-Earned Value Mgmt. System   OECM-Office of Engr. & Const. Mgmt.   SER-Safety Evaluation Report
HA-Hazard Analysis   QA-Quality Assurance   SVAR-Security Vulnerability Assess. Report
IPR-Independent Project Review   PSVR- Prelim. Safety Validation Report   TPC-Total Project Cost

Budget Related Documents

• After CD-0 approval, Exhibit 300 for Projects =>$20M: Annual submission initiated during the federal budget cycle when funds are requested.

• Project Data Sheets: Annual submission initiated during the federal budget cycle when TEC funds are requested.